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# Selected Speeches and News Releases

October 19 - October 26, 1989

## IN THIS ISSUE:

### News Releases—

Conservation Plans Completed for 98 Percent of Highly Erodible Cropland

USDA Proposes to Amend the Swine Identification Regulations

USDA Eliminates Nitrate in Specialty Bacon

USDA Scientists Try to Stave Off Future Epidemics of Wheat Rust

Agricultural Watersheds Selected for Water Quality Technical Assistance

Conservation Reserve Program Participants Due \$1.5 Billion

USDA Announces Prevailing World Market Rice Prices

USDA Announces Plans for World's First Commercial Kenaf-Based Newsprint Mill

Scientists Finding Out Which Genes Enable Cattle to Resist Disease

Patents Take USDA Research Into Marketplace

USDA Issues Tip Sheets on Transporting Food by Truck

### Background—

Bluetongue Disease and Cattle Exports to Europe



# News Releases

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U.S. Department of Agriculture • Office of Information

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## CONSERVATION PLANS COMPLETED FOR 98 PERCENT OF HIGHLY ERODIBLE CROPLAND

WASHINGTON, Oct. 19—Conservation plans have been developed for 133 million acres, or 98 percent, of the nation's highly erodible cropland, the U.S. Department of Agriculture's Soil Conservation Service reported today.

“Our goal is to have all plans done by the Dec. 31, the deadline for farmers who want them and want to stay eligible for USDA program benefits,” said SCS Chief Wilson Scaling. “We’re right on target with that goal.”

“We now have the biggest conservation effort in history ahead of us,” Scaling said. “Over the next five years, farmers will be carrying out these plans under the time table they’ve agreed upon, with all work to be done by Dec. 31, 1994.”

The conservation provisions in the Food Security Act of 1985 for the first time linked farmers' eligibility for USDA farm program benefits to their conservation activities. Farmers must be actively applying a conservation plan on their highly erodible fields by the beginning of calendar year 1990, and have that plan fully implemented by Dec. 31, 1994, if they want to stay eligible for USDA farm program benefits.

To date, farmers have fully implemented their plans on 38.6 million acres—29 percent of the nation's highly erodible land.

Record numbers of conservation practices are scheduled to be completed over the next five years, said Scaling.

“We’ve been helping farmers to switch to conservation tillage for over two decades and install terraces and waterways for over five decades—but never on the scale that we anticipate in the next five years,” he said.

“We’re working with farmers, contractors and their associations, and others in the private sector to find innovative and effective ways to tackle the conservation challenge and opportunity that lies ahead,” Scaling said.

The following table summarizes, state by state, highly erodible land determinations completed, percentage of land for which conservation plans are completed and percentage of land for which plans have been implemented.



	Total Highly Erodible Land (HEL) (acres)	HEL Deter- minations Completed (% of acres)	HEL Plans Completed (% of acres)	Systems Implemented (% of acres)
Alabama	1,600,000	100	100	20
Alaska	49,579	100	94	32
Arizona	706,374	100	100	86
Arkansas	530,765	95	91	28
California	900,000	100	95	41
Colorado	9,179,031	100	100	27
Connecticut	13,600	100	100	11
Delaware	10,651	100	99	36
Florida	210,000	100	90	50
Georgia	963,309	100	100	48
Hawaii	83,417	100	100	11
Idaho	3,659,279	97	77	27
Illinois	4,912,384	99	93	13
Indiana	2,736,341	100	86	19
Iowa	11,750,000	100	100	19
Kansas	13,059,645	100	100	30
Kentucky	4,200,000	84	72	23
Louisiana	177,994	100	96	38
Maine	150,060	86	100	65
Maryland	312,161	100	100	11
Massachusetts	15,325	100	100	33
Michigan	575,000	100	98	36
Minnesota	2,507,259	99	100	35
Mississippi	1,559,687	100	85	27
Missouri	6,300,566	100	100	25
Montana	13,716,179	100	100	42
Nebraska	9,703,876	92	92	33
Nevada	125,000	100	85	59
New Hampshire	6,200	100	95	23
New Jersey	71,683	100	94	7
New Mexico	1,720,736	100	100	25
New York	1,020,042	100	86	30
North Carolina	1,206,865	100	100	9
North Dakota	7,014,776	84	84	9

Ohio	1,749,150	100	89	12
Oklahoma	4,739,825	100	100	24
Oregon	1,668,000	100	97	50
Pacific Basin	100	0	0	0
Pennsylvania	1,900,000	100	87	11
Puerto Rico	1,019	100	100	100
Rhode Island	494	100	100	100
South Carolina	417,673	92	81	42
South Dakota	3,631,321	100	99	18
Tennessee	2,513,100	100	78	9
Texas	12,026,372	100	100	55
Utah	527,288	100	100	84
Vermont	83,000	100	97	20
Virginia	1,027,815	100	100	10
Washington	3,652,000	100	90	24
West Virginia	65,000	100	100	38
Wisconsin	3,292,288	100	100	64
Wyoming	944,500	100	99	66
NATIONAL	138,986,729	100	98	29

Diana Morse (202) 447-4772

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# USDA PROPOSES TO AMEND THE SWINE IDENTIFICATION REGULATIONS

WASHINGTON, Oct. 19—The U.S. Department of Agriculture is proposing to amend the swine identification regulation to permit swine in interstate commerce to be identified at the first point of concentration. The proposal lists possible first points of concentration where identification may be applied.

The swine identification regulation provides a system to help USDA’s Animal and Plant Health Inspection Service locate swine infected with disease, trace those swine to their source and identify all animals that may have been exposed to the disease. These traceback capabilities also help USDA’s Food Safety and Inspection Service identify and eliminate the source of diseased animals when adulterated carcasses are found at slaughter.

The swine identification rule became effective on Nov. 14, 1988, and says that all swine in interstate commerce must be identified except for swine from farrow-to-finish operations which are taken directly to a slaughtering plant from the premises where they were born.

Current regulations say that, in many cases, the producer is responsible for identifying swine before they enter interstate commerce. Changes in the current regulations are necessary to provide for effective traceback of diseased or adulterated swine, without unnecessarily disrupting standard marketing procedures.

Based on the analysis of industry requests and APHIS experience in conducting swine disease eradication programs, an effective swine ID program can be accomplished if swine are identified at the first point of concentration.

Possible first points of concentration where identification may be applied include:

- The point of first commingling in interstate commerce with swine from any other source, such as when a truck driver picks up swine from different farms for delivery to market. Swine identified at this point could be traced directly back to their herd of origin.

- Upon unloading in interstate commerce at any stockyard, livestock market, or buying station, which is the traditional point of identification of swine. The proposed regulations would allow swine in interstate commerce to be identified at these locations if they are not commingled with other swine or transferred to a new owner.

- Upon transfer of ownership of the swine in interstate commerce—swine in interstate commerce would have to be identified at the time of transfer of ownership.

- Upon arrival in interstate commerce at the final destination of swine. This provision would apply to swine in interstate commerce moved directly to a breeding farm or to a slaughter establishment.

USDA also is proposing to clarify the list of approved devices used for identifying swine in interstate commerce. These devices, which would be used to identify swine moving to slaughter, would include official swine tattoos, other approved tattoos of at least four characters and USDA backtags.

Comments will be accepted if they are received on or before Dec. 19. An original and three copies of written comments referring to docket No. 89-006 should be sent to Chief, Regulatory Analysis and Development,



PPD, APHIS, USDA, Room 866, Federal Building, 6505 Belcrest Road, Hyattsville, Md., 20782.

Comments may be inspected at USDA, Rm. 1141-S, 14th Street and Independence Avenue, S.W., Washington, D.C., between 8 a.m. and 4:30 p.m., Monday through Friday, except holidays.

Marlene Stinson (301) 436-7255

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## USDA ELIMINATES NITRATE IN SPECIALTY BACON

WASHINGTON, Oct. 19—Effective Jan. 18, 1990, the U.S. Department of Agriculture will prohibit the use of nitrate and limit the amounts of nitrite in two curing methods for specialty bacon, which accounts for about 2 percent of the bacon made in the United States.

“The new regulation will help avoid any health risk from nitrosamine formation when these types of bacon are fried,” said Dr. Lester M. Crawford, administrator of USDA’s Food Safety and Inspection Service.

In this country, about 98 percent of bacon is made by injecting or “pumping” nitrite cures into pork bellies. FSIS has not allowed nitrates and limited the use of nitrites in pumped bacon since 1978, Crawford said.

The new rule permits up to 200 parts per million (ppm) sodium nitrite for dry cured bacon, in which the cures are rubbed onto the pork belly surface. For the second type of specialty bacon covered by the new rule, “immersion cured,” the rule allows 120 ppm of sodium nitrite.

Finally, the rule brings the production of bacon made by a new process called “massaging”—in which the bellies are placed in cure-filled drums and tumbled—under the same rules as pumped bacon.

Nitrites offer protection against microbiological problems and give bacon a distinctive color and taste. Because the nitrites can combine with amines in meat to form nitrosamines and certain nitrosamines have been shown to cause cancer in laboratory animals, FSIS limits nitrite use in bacon.

This rule, scheduled to appear Oct. 20 in the Federal Register, is similar to a proposal issued Jan. 13, 1989. Four comments were received. Two, from bacon processors, opposed the proposal. The others supported the nitrate ban.

One consumer suggested banning nitrites as well as nitrate, but Dr. Crawford responded that nitrite use can be controlled to prevent adulteration and noted that the salts protect against rancidity and microbial growth.

A professional organization supported the proposal but cautioned FSIS to be sure that the changes do not lead to microbiological problems. FSIS responded that many manufacturers already conform to the rule and that present knowledge of microbiology indicates that the potential for problems is negligible.

FSIS is the federal agency that inspects meat and poultry products to ensure safety, wholesomeness and accuracy of labels.

Jim Greene (202) 382-0314

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## **USDA SCIENTISTS TRY TO STAVE OFF FUTURE EPIDEMICS OF WHEAT RUST**

WASHINGTON, Oct. 20—For wheat growers, the most worrisome rust is not the stuff that corrodes their trucks and tractors.

Instead, it's wheat stem rust, caused by a fungus that can mutate and multiply to cause a ruinous epidemic in wheat fields, said Norman D. Williams of the U.S. Department of Agriculture's Agricultural Research Service. Stem rust causes lesions on stems and leaves and shrivels grain before harvest.

At a meeting of the American Society of Agronomy this week in Las Vegas, Nev., Williams reported research findings that could lead to giving farmers "rust insurance" against races of stem rust that haven't yet shown up.

Currently, commercial varieties of rust-resistant spring wheat keep yield losses in the Northern Great Plains below 1 percent and help farmers avoid using fungicides. But, "we're trying to avert epidemics that still pose a threat, through vigilant efforts to predict new rust races and to develop resistant wheats," he said.

Williams, a plant geneticist, heads a team of ARS cereal-crop researchers at the ARS Northern Crop Science Laboratory, Fargo, N.D. He said the team has now identified three hard red spring wheat varieties—Len, Coteau and Stoa—as good sources for genes to counter new rust strains that can arise through the fungi's own genetic mutation.

“Resistance genes from these three wheat varieties stood up superbly to a virulent strain of stem rust developed in the laboratory,” said Williams.

James D. Miller, a plant pathologist at the Fargo lab, developed the virulent fungus strain sexually from four rust races that he grows under quarantine conditions on barberry, a shrub.

When Miller applied the test fungus to Len, Coteau, Stoa and a fourth variety, Waldron, he saw that genes in the first three made them resistant to it. Waldron succumbed to the test fungus even though it is a prized progenitor of new wheat varieties because it has at least four rust resistance genes and other desired qualities.

After applying the fungus to second-generation plants from crosses among the four wheat varieties and observing degrees of rust damage, the scientists concluded that Len has a resistance gene not possessed by Waldron. Coteau has two such genes and Stoa has three.

Future wheat varieties with these genes may be well equipped to resist an onslaught of new rust races that differ slightly from today’s races, Williams said. The laboratory race that Miller used is genetically most similar to—but is much more virulent than—race 15TNMK, the predominant race in states ranging from Texas to Minnesota.

The team is both looking for and finding rust resistance not only in commercial wheats of the present and the recent past but also in wheat’s wild cousins such as emmer.

Stem rust fungi normally do not survive winters in the northern United States. In the spring, however, airborne fungi travel northward by wind to infect wheat.

Until plant breeders developed the first rust-resistant wheat varieties in the early 20th century, Williams said, wheat stem rust was perhaps the most important plant disease of a major food crop.

Ben Hardin (309) 685-4011

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## **AGRICULTURAL WATERSHEDS SELECTED FOR WATER QUALITY TECHNICAL ASSISTANCE**

WASHINGTON, Oct. 20—Thirty-seven agricultural watershed areas have been selected for technical assistance to improve water quality, Wilson Scaling, chief of the U.S. Department of Agriculture’s Soil Conservation Service, announced today.



“These hydrologic unit areas were selected as part of the president’s 1990 Water Quality Initiative because of their identified and prioritized water quality problems,” Scaling said.

The areas were selected by an interagency committee based on factors such as agriculturally related problems, surface and ground water effects, feasibility of treatment, and identification within state water quality assessment and management plans under Section 319 of the Clean Water Act.

These projects will be implemented through the cooperative efforts of SCS, USDA’s Cooperative Extension Service and Agricultural Stabilization and Conservation Service, in coordination with the Environmental Protection Agency and state and local agencies.

The water quality projects selected are:

State	Name of Project
Alabama	Sand Mountain/Lake Guntersville
Arizona	Casa Grande/Coolidge
Arkansas	Moore’s Creek
California	Westside San Joaquin Valley
Connecticut	Housatonic River
Delaware	Inland Bays
Florida	Middle Suwannee River
Illinois	Illinois River Sands
Iowa	Union Grove & Black Hawk
Indiana	Upper Tippacanoe
Louisiana	Bayou Queue De Tortue
Maine	Long/Cross Lakes
Massachusetts	Buzzards Bay
Michigan	Sycamore Creek
Minnesota	St. Peter/Prairie Du Chien
Mississippi	Tangipahoa River
Montana	Godfrey Creek
Nebraska	Elm Creek
New Hampshire	Great Bay
New Mexico	Dona Ana/Sierra
New York	East Sidney Lake
North Carolina	Goshen Swamp
North Dakota	Bowman/Haley



Ohio  
Oklahoma  
Oregon  
Puerto Rico  
Rhode Island  
South Carolina  
South Dakota  
Tennessee  
Texas  
Utah  
Vermont  
West Virginia  
Wisconsin  
Wyoming

Indian Lake  
Battle Branch  
Ontario  
Lake Loiza  
Pawcatuck  
Camping Creek  
Richmond Lake  
N. Fork Creek & Fall Creek  
Upper North Bosque  
Little Beaver River  
Lower Missisquoi  
Greenbriar River  
Plover/Whiting Wellhead Area  
Ocean Lake

Diana Morse (202) 447-4772

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## **CONSERVATION RESERVE PROGRAM PARTICIPANTS DUE \$1.5 BILLION**

WASHINGTON, Oct. 20—The U.S. Department of Agriculture today announced it will issue nearly \$1.5 billion in cash payments to approximately 300,000 producers participating in the Conservation Reserve Program.

Keith Bjerke, executive vice president of USDA's Commodity Credit Corporation, said the annual rental payments are for contracts producers signed to place cropland in the CRP in 1986, 1987, 1988 and 1989.

Under the CRP, producers agree to retire highly-erodible and other eligible cropland from production for 10 years. In return, USDA contracts for annual rental payments to the producers and shares with them the cost of establishing an approved vegetative cover.

Payments will be made as soon as possible.

Robert Feist (202) 447-6789

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## **USDA ANNOUNCES PREVAILING WORLD MARKET RICE PRICES**

WASHINGTON, Oct. 24—Acting Under Secretary of Agriculture John B. Campbell today announced the prevailing world market prices of milled rice, loan rate basis, as follows:

- long grain whole kernels, 10.76 cents per pound;
- medium grain whole kernels, 9.74 cents per pound;
- short grain whole kernels, 9.62 cents per pound;
- broken kernels, 5.38 cents per pound.

Based upon these prevailing world market prices for milled rice, rough rice world prices are estimated to be:

- long grain, \$6.65 per hundredweight;
- medium grain, \$6.09 per hundredweight;
- short grain, \$5.87 per hundredweight.

The prices announced are effective today at 3 p.m. EDT. The next scheduled price announcement will be made Oct. 31, at 3 p.m. EST, although prices may be announced sooner if warranted.

Gene Rosera (202) 447-7923

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## **USDA ANNOUNCES PLANS FOR WORLD'S FIRST COMMERCIAL KENAF-BASED NEWSPRINT MILL**

McALLEN, Texas, Oct. 25—Secretary of Agriculture Clayton Yeutter today announced plans by industry to construct the world's first kenaf-based newsprint mill in south Texas by 1991.

Yeutter said construction of the 84-ton-per-day mill “signals the first use of kenaf as a commercial fiber in North America and a culmination of a successful four-year cooperative effort between the U.S. Department of Agriculture and the private sector in a commercialization project linking the farm and industry.”

Yeutter was in McAllen to attend a luncheon at the 49th Annual Meeting of the Texas Soil and Water Conservation District Directors.

Kenaf is a fast-growing, annual, non-wood fiber plant—a relative of cotton and okra—which matures in 5 months. Newsprint processed from kenaf was successfully used in 1987 by newspapers in California, Texas, and Florida. These pressroom trials demonstrated to the American

Newspaper Publishers Assn. that kenaf newsprint is brighter and stronger and uses less ink and less pulping energy than many of its wood counterparts.

USDA has supported the kenaf commercialization project with \$1.85 million since 1986 through a combination of research and demonstration activities with private companies, universities and other government agencies.

The industrial sponsor of the \$35 million dollar mill is The Kenaf Paper Co. of Texas, which includes Kenaf International of Bakersfield, Calif.; Bechtel Enterprises, Inc. of San Francisco; and the Sequa Capital Corporation of New York.

The mill will be located in western Willacy county with the farming of the kenaf scheduled for Willacy, Hidalgo, and Cameron counties. The marketing region may reach as far as Dallas/Ft. Worth and Houston, with annual revenues of approximately \$18 million dollars. About 4,500 acres will be under cultivation annually with expected yields between 6 and 8 tons per acre.

Finding ways to commercialize U.S.-grown products is of prime importance, Yeutter said.

“In the establishment of this mill, we see a new industrial product for agriculture and a major step towards the diversification of U.S. farming,” he said.

USDA’s Agricultural Research Service and Cooperative State Research Service work to provide U.S. farmers with new options through research, development, and commercialization programs.

In 1988 Research & Development magazine, a Cahners publication, hailed USDA for its kenaf technology in developing the process of making kenaf fiber into newsprint, and as one of the 100 most significant new technical products for the year.

Jane Ross (202) 447-2929

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## SCIENTISTS FINDING OUT WHICH GENES ENABLE CATTLE TO RESIST DISEASE

WASHINGTON, Oct. 25—The capacity for beef and dairy cattle to resist disease is locked inside their genes, but U.S. Department of Agriculture scientists are carefully selecting the combination.

“Cattle producers could reduce animal losses and veterinary bills, if they knew which calves—or their parents—had genetically based disease resistance,” said Roger T. Stone, animal physiologist with USDA’s Agricultural Research Service. He said savings could reach millions of dollars annually in the United States.

In the future, Stone added, scientists may be able to genetically engineer cattle with resistance to some of the most costly diseases. But, he said, the first big hurdle is to identify the genes that confer disease resistance.

As a start, Stone and co-researcher Noelle Muggli-Cockett have identified five genes in cattle that are comparable to human genes for the major histocompatibility complex (MHC). In humans, the MHC controls the major disease-fighting genes, said Stone at the U.S. Meat Animal Research Center, Clay Center, Neb.

The studies by Stone and Muggli-Cockett, begun in 1985, are the first to show directly the similarities between MHC gene sequences in cattle and those in other species, including humans. MHC genes produce proteins that are involved in recognizing disease organisms.

“Genetic resistance to disease is like an incredibly complicated combination lock,” Stone said. “To pick that lock, we have to identify hundreds of genes that, taken together, determine an animal’s inherited resistance to a disease. With continued research, we hope to pin down the most important ones.”

To group cattle according to the type of MHC genes they have, Muggli-Cockett is using parts of the newly-identified genes to make gene probes. Just as a key fits a lock, a gene probe is a string of genes that fits only into an identical string of genes belonging to an organism.

After classifying the cattle groups, researchers will determine if animals with different types of MHC genes are more or less likely to get a disease. The first disease to be studied will be that caused by bovine viral diarrhea virus, a cattle virus that causes millions of dollars in lost livestock production each year. Muggli-Cockett said this work will be



done in cooperation with veterinarian Clayton Kelling of the University of Nebraska at Lincoln.

The gene probes, she added, will aid in matching MHC gene types to antibody production. An animal produces antibodies when its immune system detects foreign invaders—such as disease-causing bacteria or viruses—or vaccines.

“Livestock producers,” Stone said, “are concerned with those diseases that affect a large percentage of the cattle population, such as respiratory diseases in beef cattle and mastitis in dairy cows.

“Our goal is to improve the overall health of livestock without compromising desirable production traits like growth, reproduction or meat quality. But for this to be a reality, the genes responsible for disease resistance, or susceptibility, must be identified and understood.”

Cattle diseases need not be debilitating or fatal to cause losses to producers, he pointed out. Even an infection without obvious symptoms can be costly if it affects growth rate, reproduction or milk yield.

Other research on animal genetics is being carried out by ARS scientists at Beltsville, Md., including work on parasite resistance and engineering of embryos to accept foreign genes.

Linda Cooke (309) 685-4011

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## **PATENTS TAKE USDA RESEARCH INTO MARKETPLACE**

WASHINGTON, Oct. 25—There is frozen concentrated orange juice and lemonade, but frozen concentrated milk?

A U.S. Department of Agriculture scientist figured if concentration works for citrus, why shouldn't it work with milk. The result is a new product that can be pulled from the freezer.

Frozen concentrated milk is one of 35 inventions patented in the last fiscal year by USDA's Agricultural Research Service.

“We have had 418 patents granted over the last 10 years,” said R. Dean Plowman, ARS administrator. “These inventions involve new and higher quality products, prevention of diseases in plants and animals, and natural control of pests that harm our environment and food supply.”

George N. Bookwalter, an ARS research food technologist in Peoria, Ill., developed the milk concentrate. It can be immediately blended into a

beverage or frozen for later use. A company is currently testing samples from the scientist.

Frozen concentrated milk might sound a little farfetched, but so did past agency inventions like instant potato flakes and frozen concentrated orange juice. All are examples of patented research discoveries that have gone into the marketplace—‘and that is something we want to see grow in the future,’ Plowman said.

In fiscal 1989, the agency filed more than 60 patent applications on inventions stemming from its research labs. Some of the patented ARS inventions have been licensed by private industry and are in use. Others will be available in the future.

As patented research increases, so do royalties paid to the agency. Twenty-one royalty-bearing licenses were granted in 1989. ARS has increased its income from licensed agency-patented inventions from \$7,300 in 1981 to more than \$300,000 in 1989.

Fiscal 1990 is expected to be the first year that royalties will exceed patent and licensing expenses, Plowman said. As ARS expands its royalty base, he added, these non-taxpayer dollars will be used to reward scientists, pay patent and licensing fees, and return money to research programs where the patents originated.

Some of this patented research has helped add jobs and new income in the private business sector, he said. In turn, the payoff to the consumer is in higher quality fabrics and foods, and a more healthful, convenient food supply, he said. ARS patented research has even expanded into medicine.

Alice A. Christen, a research geneticist at an ARS lab in New Orleans, developed a way to mass-produce taxol, a drug used in clinical trials of cancer patients. Currently, taxol comes from the bark of the Pacific Yew, a tree native to the Pacific northwest and in limited supply. Christen is able to easily multiply taxol-like cell cultures. If commercialized, taxol could become more accessible to cancer patients in need of the drug.

Consumers looking for a strong calcium and protein source can soon take advantage of an ARS patented flan pudding invented by Ranjit S. Kada, a research food technologist in New Orleans. His yogurt-like pudding is made from non-fat dry milk, sugar, rice flour gums and other ingredients. Vitamins and artificial sweeteners can be added to the dry mix.

Academia Catalyst Corp. of Valhalla, N.Y., obtained a license for the patent. Larry Kunststadt, president of the company, said it hopes to commercialize the pudding within a year.



To curb the threat of salmonella contamination, ARS microbiologists Nelson A. Cox and Joseph S. Bailey, Jr. in Athens, Ga., invented and are patenting a bacteria injection method. It heads off the food poisoning problem before the chick leaves the egg. When competitive “good” bacteria are injected into incubating eggs, salmonella won’t attach to the intestinal wall of chicks and later contaminate poultry.

“ARS research is committed to solving agricultural problems that affect farmers, workers and consumers,” Plowman said. “Our patented research is the keystone of the agency’s technology transfer program.”

Bruce Kinzel (301) 344-2739

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## USDA ISSUES TIP SHEETS ON TRANSPORTING FOOD BY TRUCK

WASHINGTON, Oct. 26—The U.S. Department of Agriculture has issued three new “tip sheets” on guidelines for preventing contamination of food transported in trucks.

One of the tip sheets addresses sanitation of transport vehicles hauling food, another addresses construction materials and cleaning compounds for food-transporting vehicles, and the third looks at regulations governing the joint use of vehicles transporting food and hazardous materials.

Martin F. Fitzpatrick, Jr., administrator of USDA’s Office of Transportation, said the tip sheets address regulations of USDA’s Food Safety and Inspection Service, the U.S. Department of Transportation, the Food and Drug Administration and the Environmental Protection Agency.

“All of these agencies, as well as some state governments, have certain responsibilities for enforcing regulations designed to prevent contamination of food during transportation,” Fitzpatrick said. “The tip sheets also outline industry practices aimed at preventing contamination.”

Fitzpatrick said the tip sheets are being distributed to food processing and distribution associations, to transportation organizations, and to other groups and organizations involved with the transport of food. “We are asking these organizations to make this information available to their members,” he said.

Larry Mark (202) 447-3977

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## **Background—**

### **BLUETONGUE DISEASE AND CATTLE EXPORTS TO EUROPE OVERVIEW**

Bluetongue is a viral disease of sheep, cattle, goats and other ruminants. It is particularly damaging in sheep. Up to half the sheep in an infected flock may die, according to U.S. Department of Agriculture veterinarians.

In sheep, clinical signs of the disease include ab Q%=s, lameness, mouth sores, and the discolored tongue that gives the disease its name. By contrast, signs in cattle generally are mild and frequently overlooked. Cattle producers in recent years have considered bluetongue a problem mainly because of the hurdle it represents to selling to the lucrative European market.

### **EC POSITION**

In 1980, European Community officials put a ban on cattle from the United States, severing an export outlet that in 1979 alone had brought in about \$2.5 million. Europe is generally free of bluetongue, and European governments feared that infection might spread into their sheep.

Responding to the European action, veterinarians in USDA's Animal and Plant Health Inspection Service identified a zone within the United States from which cattle could be exported with minimal risk from bluetongue. The zone covers 18 northern and eastern states, stretching from North Dakota to Maryland.

Bluetongue is spread between animals by biting gnats. Because of the climate transmission does not seem to occur in the zone, as supported by serological tests conducted on blood samples collected at slaughter plants since 1980. In a typical year, just a fraction of one percent of the more than 10,000 random samples taken inside the zone test positive. By contrast, had an infection rate of 12 percent.

The EC accepted cattle from the free zone until 1983, after which officials also imposed a ban on the zone. (The EC has been accepting exports of semen from the zone, however.) The ban was also adopted by Finland, Norway and Sweden, which are not EC members. EC officials recognized that accurate test identifying bluetongue-free cattle were available, but they stated that cattle could be infected by gnats between



the time blood samples are taken and the time shipments depart for Europe.

By contrast, all other U.S. trading partners accept cattle under some conditions. Importing nations include Australia and New Zealand, countries with a sheep industry that could incur major losses from the introduction of animals infected with bluetongue.

## NEW TECHNOLOGY

New technology permits a way for U.S. exporters to ship to EC countries. The Community has agreed to accept imports of cattle embryos. These are collected from U.S. donor cows, frozen in liquid nitrogen, and exported for implantation into European recipient cows.

The safety of this "foster parent plan" was confirmed by a study conducted last year by APHIS and USDA's Agricultural Research Service. Researchers collected embryos from donor cows that had been experimentally infected with bluetongue. The 100 recipient cows were free of bluetongue before the start of the trial. All 100 recipient cows remained free of bluetongue after embryos had been implanted, as were the resulting calves. Thus, the researchers showed that the disease doesn't pass from a donor cow to a recipient cow or to the embryo under the "foster parent plan."

Individual member countries of the EC still differ in requirements they have for donor cows, ranging from no restrictions to complex testing. EC officials expect to have a common policy in place by 1992.

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